

Cheyenne Tetrachloroethylene (PCE) Plume Orphan Site

Commercial Air Testing Procedures

February 2010

The following guidelines have been prepared by the Wyoming Department of Environmental Quality (DEQ) to provide business owners with a general understanding of the activities and timeframes that occur during and after the indoor air of their building has been tested. These are general timeframes and may be subject to change depending on the laboratories used to analyze results.

- The first step in the process is a building inspection. DEQ and/or a representative of DEQ's contractor, EnviroGroup, conducts an interview with the business owner, or their tenant. A building walk-through will generally be conducted at this time and questions will be asked regarding chlorinated solvent use/storage in the building. Information on HVAC operation and zones will also be collected. Initial proposed sampling locations will be selected at this time in conjunction with the property owner or tenant. If possible, any chlorinated solvents used/stored in the building will be temporarily removed.
- An EnviroGroup representative places several small stainless steel air sampling canisters in the lowest occupied areas of the building. Eight hours later, an EnviroGroup representative retrieves the canisters.
- A detailed inventory of chlorinated solvent use/storage will be conducted for the areas near sampling locations.
- If the owner permits, several small one inch diameter holes will be drilled through the slab of the basement, or lowest floor of the building, in order to allow the collection of "sub-slab gas" samples into similar sampling canisters. These samples are used to evaluate the concentration of vapors directly beneath a building.
- At week's end, canisters are sent to an out-of-state, DEQ-approved laboratory for analysis.
- DEQ mails test results to owners (approximately 4 weeks after test).
- If the result of the test equals or is above the state action level for PCE in commercial settings (27.2 micrograms per cubic meter $\mu\text{g}/\text{m}^3$), a DEQ representative also calls the owner with test results. If the owner elects to receive a sub slab ventilation system, DEQ and/or DEQ's contractor will call the owner to set up an appointment to perform diagnostic testing required for design of a ventilation system.
- If the result of the test is below the state action level, no ventilation is necessary. Periodic (e.g., annual) follow-up testing may be conducted. Owners will be contacted by DEQ or a representative of DEQ's contractor to schedule the periodic tests.

For More Information

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